BRUHAT BANGALORE MAHANAGARA PALIKE

Project:Asphalting to Roads and Improvements to Drains at Bhararth Nagara Cross roads near baloonfactory in ward no 06 Byatarayanapura Sub division

Amt 45.00lakhs

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Baloon Factory surrounding	Cum							
	cross road 1 E/W		1	60.00	0.50	0.50	15.00		
	cross road 2 E/W		1	80.00	0.50	0.50	20.00		
	cross road 2 W/E		1	50.00	0.50	0.50	12.50		
	cross road 3 E/W		1	85.00	0.50	0.50	21.25		
	cross road 3 W/E		1	52.00	0.50	0.50	13.00		
	cross road 4 E/W		1	85.00	0.50	0.50	21.25		
	Culverts		3	6.50	2.00	0.95	37.05		
							140.05	186.92	**26178.15**
	Basic rate	**82**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 =	**100**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	Removing & Refixing Stone slabs of drains and Pointing in C.M(1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17)								
	BS Slab Drain	Sqm							
	cross road 1 E/W		1	60	1.35	--	81.00		
	cross road 2 E/W		1	80	1.35	--	108.00		
	cross road 2 W/E		1	50	1.35	--	67.50		
	cross road 3 E/W		1	85	1.35	--	114.75		
	cross road 3 W/E		1	52	1.35	--	70.20		
	cross road 4 E/W		1	85	1.35	--	114.75		
	cover		3	50	1.20	--	180.00		
	Consider 15% Missing slabs and damaged slabs						-110.43		
							625.77	80.56	**50412.03**
	Basic rate	**76**							
	Area Weightage 6%	**4.56**							
	Final Rate	**80.56**							
3	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	Baloon Factory surrounding	Sqm							
	Consider 20% Missing slabs and damaged slabs						110.43		
							110.43	665.68	**73511.04**
	Basic rate	**628**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
4	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	forCulverts								
	Culverts		3.00	6.50	2.00	0.15	5.85		
							5.85	5348.76	**31290.25**
	Basic rate	**5046**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.8**							
5	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)								
	Culverts	cum	6	7	0.60	0.90	21.06		
							21.06	4438.22	**93468.91**
	Basic rate	**4187**							
	Area Weightage 6%	**251.22**							
	Final Rate	**4438.2**							
6	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17)								
	Culverts	Sqm	6	6.50		0.90	35.10		
							35.10	102.82	**3608.98**
	Basic rate	**97**							
	Area Weightage 6%	**5.82**							
	Final Rate	**102.82**							
7	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Coping	Cum							
	Culverts		6	6.50	0.60	0.10	2.34		
							2.34	5767.46	**13495.86**
	Basic rate	**5441**							
	Area Weightage 6%	**326.46**							
	Final Rate	**5767.5**							
8	Providing and fixing **RCC Precast cover slab of 250mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culverts		6.00	6.50	2.00	--	78.00		
							78.00	5317.00	**414726.00**

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Data Rate =5317								
9	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	cross road 1 E/W		1	60	5.20	0.30	93.60		
	cross road 2 E/W		1	80	5.00	0.30	120.00		
	cross road 2 W/E		1	50	6.00	0.30	90.00		
	cross road 3 E/W		1	85	4.80	0.30	122.40		
	cross road 3 W/E		1	52	5.50	0.30	85.80		
	cross road 4 E/W		1	85	5.10	0.30	130.05		
							641.85	148.76	**95481.61**
	Basic rate	**46**							
	Loading and unloading with 10km lead= 68+2.2x1.28x10 =	**100**							
	Area Weightage 6%	**2.76**							
	Final Rate	**148.76**							
10	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per								
	for road work								
	cross road 1 E/W		1.00	60.00	5.20	0.15	46.80		
	cross road 2 E/W		1.00	80.00	5.00	0.15	60.00		
	cross road 2 W/E		1.00	50.00	6.00	0.15	45.00		
	cross road 3 E/W		1.00	85.00	4.80	0.15	61.20		
	cross road 3 W/E		1.00	52.00	5.50	0.15	42.90		
	cross road 4 E/W		1.00	85.00	5.10	0.15	65.03		
							320.93	5348.76	**1716577.55**
	Basic rate	**5046**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.8**							
11	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane,								
		Cum							
	cross road 1 E/W		1.00	60.00	5.20	0.10	31.20		
	cross road 2 E/W		1.00	80.00	5.00	0.10	40.00		
	cross road 2 W/E		1.00	50.00	6.00	0.10	30.00		
	cross road 3 E/W		1.00	85.00	4.80	0.10	40.80		
	cross road 3 W/E		1.00	52.00	5.50	0.10	28.60		

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	cross road 4 E/W		1.00	85.00	5.10	0.10	43.35		
							213.95	6217.96	**1330332.54**
	Basic rate	**5866**							
	Area Weightage 6%	**351.96**							
	Final Rate	**6218**							
12	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177,								
	cross road 1 E/W	Sqm	1.00	60.00	5.20	--	312.00		
	cross road 2 E/W	Sqm	1.00	80.00	5.00	--	400.00		
	cross road 2 W/E	Sqm	1.00	50.00	6.00	--	300.00		
	cross road 3 E/W	Sqm	1.00	85.00	4.80	--	408.00		
	cross road 3 W/E	Sqm	1.00	52.00	5.50	--	286.00		
	cross road 4 E/W	Sqm	1.00	85.00	5.10	--	433.50		
							2139.50	95.40	**204108.30**
	Basic rate	**90**							
	Area Weightage 6%	**5.4**							
	Final Rate	**95.4**							
								Total Construction Cost	**4053191.22**
13								**Cost towards Design Report , PMC / Third Party inspection LS**	**40531.91**
14								**Tender Premium 10%**	**405319.12**
								Sub Total	**4499042.26**
15								**Miscellaneous and rounding off**	**957.74**
								Total	**4500000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

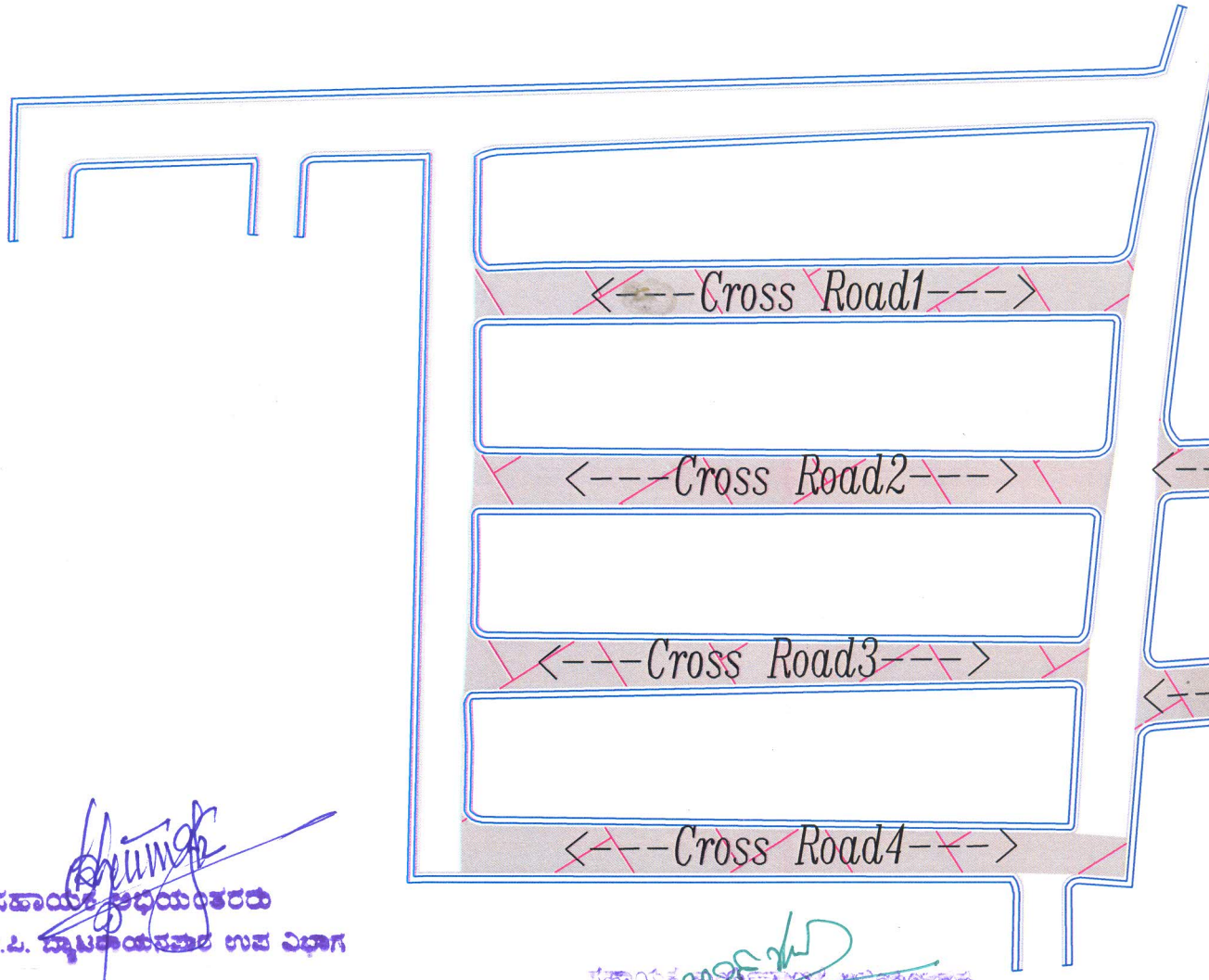
Assistant Engineer | Assistant Executive Engineer | Executive Engineer

ADMINISTRATIVE APPROVAL
Accorded For Rs. Forty Five lakhs only
Head of A/c..... P-3316
Div. Ref. No. 42/17-18 Date. 27/11/17
AE | EE(BTP)

Technical Sanction
Accorded For 45-00 lakh Rs
Head of A/C P3316
CER NO : 400 Dt: 28/11/17
TA | CE (YNK)

BRUHAT BANGA

Asphalting to Roads and Improvements to Drains at Bharathnagar Cross Roads N



ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ವ್ಯಾಪ್ತಿಯನ್ನು ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವ್ಯಾಪ್ತಿಯನ್ನು ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-23

NOTE:-

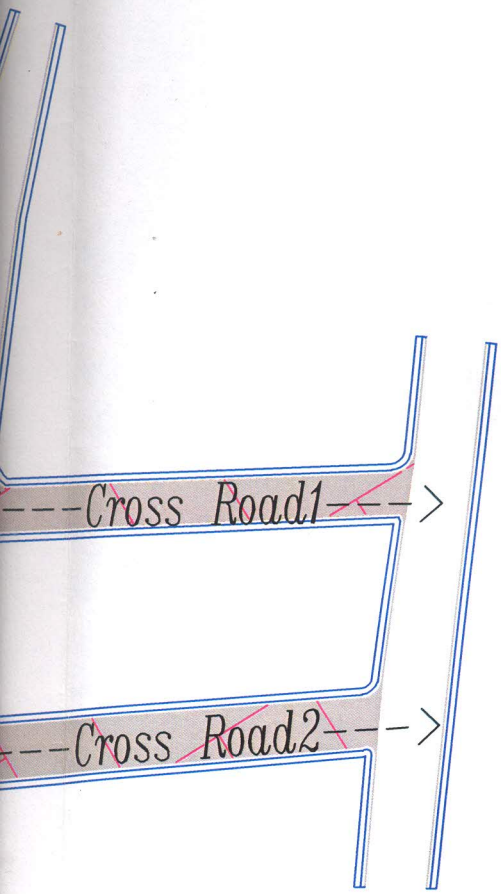
1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

NGALORE MAHANAGARA PALIKE

ds Near Baloon Factory Surrounding in Ward No 06 Byatarayanapura Sub division



Road Name	Length
Cross Road 1 LHS	60m
Cross Road 2 LHS	80m
Cross Road 3 LHS	85m
Cross Road 4 LHS	85m
Cross Road 1 RHS	50m
Cross Road 2 RHS	52m

LEGEND:-

Asphalt	WMM+BC
Asphalt	BC
CC Road	PCC+PQC
CC Road	PQC
Drain	

TITLE: STRIP PLAN

1/1

(15)

BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Asphalting roads and Improvements to Drains at Balaji layout near Railway gate Thanisandra in ward no 06 Byatarayanapura Sub division

Amt25.00lakhs

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW. P&IWTD SR 2016-17)								
	Balaji Layout	Cum							
	1st cross		2	265.00	0.65	0.50	172.25		
							172.25	186.92	**32196.97**
	Basic rate	**82**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
		Sqm							
	1st cross		2	265.00	1.80	--	954.00		
							954.00	665.68	**635058.72**
	Basic rate	**628**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							
3	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	Balaji Layout								
	1st cross		1	265	7.00	0.15	278.25		
							278.25	148.76	**41392.47**
	Basic rate	**46**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Area Weightage 6%	**2.76**							
	Final Rate	**148.76**							
4	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per								
	Road Portion	Cum							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Balaji Layout								
	1st cross		1	265.00	7.00	0.25	463.75		
							463.75	1768.08	**819947.10**
	Basic rate	**1668**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							
5	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502								
	Road Portion	sqm							
	Balaji Layout								
	1st cross		1	265.00	7.00	--	1855.00		
							1855.00	29.68	**55056.40**
	Basic rate	**28**							
	Area Weightage 6%	**1.68**							
	Final Rate	**29.68**							
6	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	For Laying BC	Sqm							
	Balaji Layout								
	1st cross		1	265.00	7.00	--	1855.00		
							1855.00	12.72	**23595.60**
	Basic rate	**12**							
	Area Weightage 6%	**0.72**							
	Final Rate	**12.72**							
7	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all								
	For Laying BC	Cum							
	Balaji Layout								
	1st cross		1.00	265.00	7.00	0.040	74.20		
							74.20	8013.60	**594609.12**
	Basic rate	**7560**							
	Area Weightage 6%	**453.6**							
	Final Rate	**8013.60**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
8	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line		2	265.00	0.10	--	53.00		
							53.00	542.72	**28764.16**
	Basic rate	**512**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
								Total Construction Cost	**2230620.54**
9	Add cost of **Waste Plastic** @ 8% of Bitumen weight								
	Bitumen = 141 kg/cum Waste =74.20X 141 X 8 / 100 = 836.98		--	--	--	--	**836.98**	27.00	**22598.00**
10								**Cost towards Design Report , PMC / Third Party inspection LS**	**22306.21**
11								**Tender Premium10%**	**223062.05**
								Sub Total	**2498586.80**
12								**Miscellaneous and rounding off**	**1413.20**
								Total	**2500000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer

Assistant Executive Engineer

Executive Engineer 27/11

Administrative Approval
Accorded For 25.00 lakh Rs.
Head of A/C P3316
CER NO : 179 Dt. 28/11/17

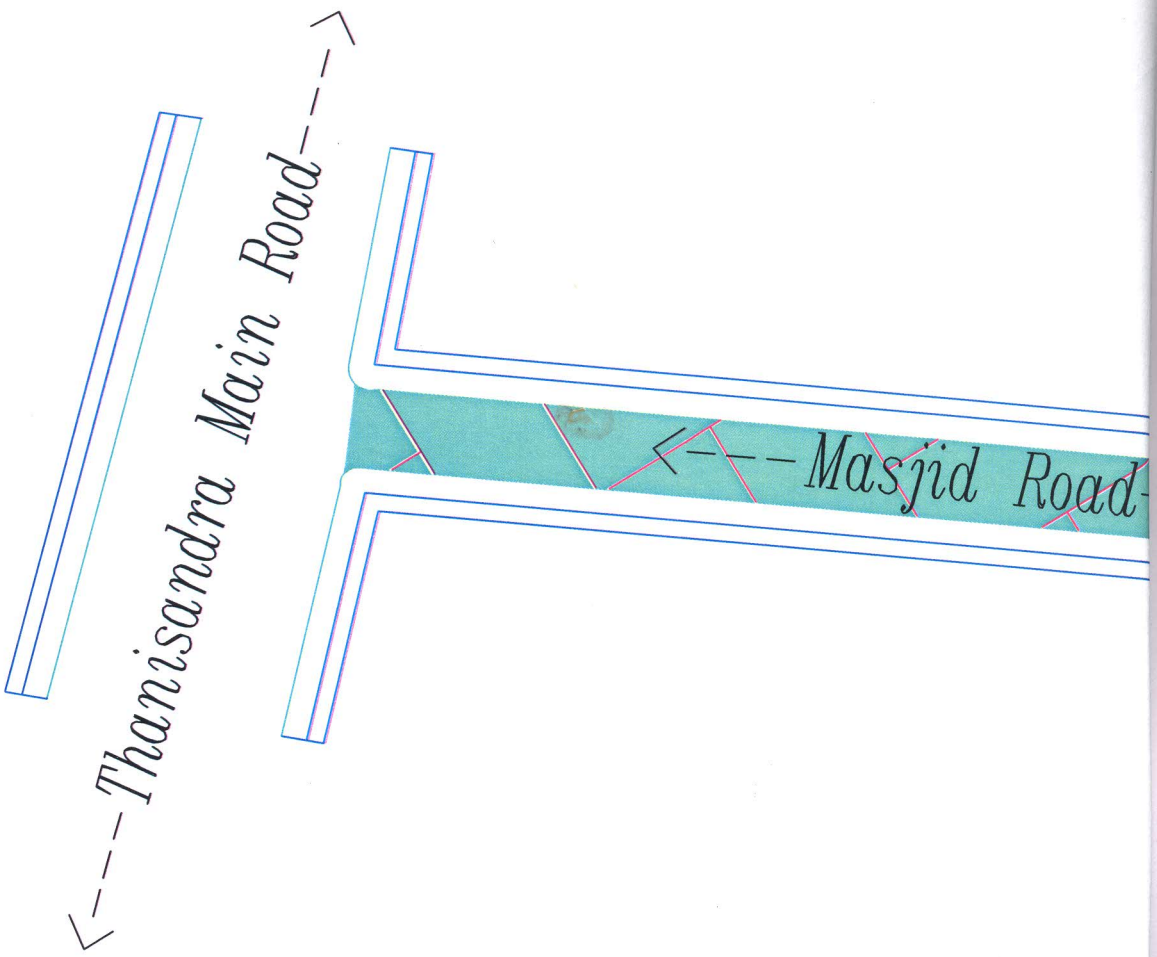
TA CE (YNK)

Technical Sanction
Accorded For 25.00 lakh Rs.
Head of A/C P3316
CER NO : 405 Dt. 28/11/17

TA CE (YNK)

BRUHAT BANGAL

Asphalting to Road and Improvements to Drains at Balaji Layout Near F



ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-24

NOTE:-

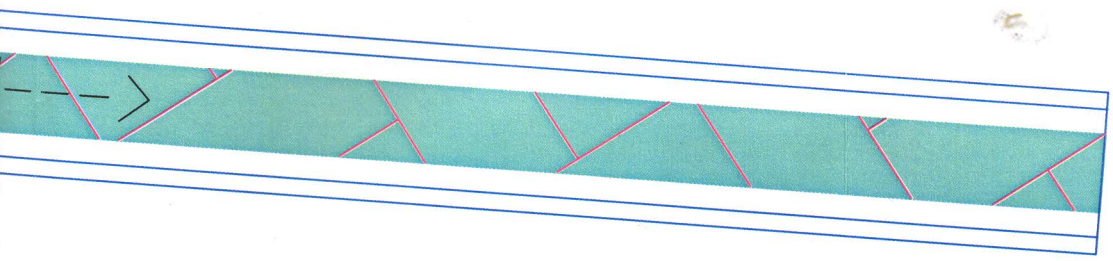
1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

GALORE MAHANAGARA PALIKE

r Railway Gate Thanisandra in Ward No 06 Byatarayanapura Sub division



Road Name	Length
Masjid Rd	265m

BALAJI LAYOUT

LEGEND:-

Asphalt		WMM+BC
Asphalt		BC
CC Road		PCC+PQC
CC Road		PQC
Drain		

TITLE: STRIP PLAN

1/1

BRUHAT BANGALORE MAHANAGARA PALIKE

Project: Improvements to Roads and Drains at saraipalya Sadiq layout cross roads in ward no 06 Byatarayanapura Sub division

Amt 30.00lakhs

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	Sadiq layout cross roads	Cum							
	cross road 1		1	32.00	0.60	0.60	11.52		
	cross road 2		1	25.00	0.60	0.60	9.00		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1	135.00	0.60	0.50	40.50		
	cross road 2 W/E		1	75.00	0.50	0.45	16.88		
	cross road 3 W/E		1	75.00	0.60	0.60	27.00		
	cross road 4 E/W		1	45.00	0.60	0.60	16.20		
	culverts		5	6.50	2.00	1.05	68.25		
	Over burden earth		2	17.00	1.80	1.50	91.80		
							281.15	186.92	**52551.62**
	Basic rate	**82**							
	Loading and unloading with 10km lead= 68+2.2x1.28x10 =	**100**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17)								
	Sadiq layout cross roads	Sqm							
	cross road 1		1	32.00	1.35	--	43.20		
	cross road 2		1	25.00	1.35	--	33.75		
	cross road 1 W/E		1	135.00	1.8	--	243.00		
	cross road 2 W/E		1	75.00	1.35	--	101.25		
	cross road 3 W/E		1	75.00	1.35	--	101.25		
	cross road 4 E/W		1	45.00	1.35	--	60.75		
							583.20	665.68	**388224.58**
	Basic rate	**628**							
	Area Weightage 6%	**37.68**							
	Final Rate	**665.68**							
3	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	For culverts								
	Culverts		5	6.00	2.00	0.15	9.00		
							9.00	5348.76	**48138.84**
	Basic rate	**5046**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.8**							

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
4	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-								
	Culverts		10	6.00	0.60	0.80	28.80		
							28.80	4438.22	**127820.74**
	Basic rate	**4187**							
	Area Weightage 6%	**251.22**							
	Final Rate	**4438.2**							
5	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17)								
	Culverts	Sqm	10	6.00		0.80	48.00		
							48.00	102.82	**4935.36**
	Basic rate	**97**							
	Area Weightage 6%	**5.82**							
	Final Rate	**102.82**							
6	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
	Coping	Cum							
	Culverts		10	6.00	0.60	0.100	3.60		
							3.60	5767.46	**20762.86**
	Basic rate	**5441**							
	Area Weightage 6%	**326.46**							
	Final Rate	**5767.5**							
7	Providing and fixing **RCC Precast cover slab of 250mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culverts		5	6.00	2.00	--	60.00		
							60.00	5317.00	**319020.00**
	Data Rate =5317								
8	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	Sadiq layout cross roads								
	cross road 1		1	32.00	4.70	0.25	37.60		
	cross road 2		1	25.00	4.60	0.25	28.75		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1	135.00	6.00	0.25	202.50		
	cross road 2 W/E		1	75.00	6.00	0.25	112.50		
	cross road 3 W/E		1	75.00	6.00	0.25	112.50		
							493.85	148.76	**73465.13**
	Basic rate	**46**							

Sl. No	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Area Weightage 6%	**2.76**							
	Final Rate	**148.76**							
9	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
	Sadiq layout cross roads								
	cross road 1		1	32.00	4.70	0.25	37.60		
	cross road 2		1	25.00	4.60	0.25	28.75		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1	135.00	6.00	0.25	202.50		
	cross road 2 W/E		1	75.00	6.00	0.25	112.50		
	cross road 3 W/E		1	75.00	6.00	0.25	112.50		
							493.85	1768.08	**873166.31**
	Basic rate	**1668**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.1**							
10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road Portion	sqm							
	Sadiq layout cross roads								
	cross road 1		1	32.00	4.70	--	150.40		
	cross road 2		1	25.00	4.60	--	115.00		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1	135.00	6.00	--	810.00		
	cross road 2 W/E		1	75.00	6.00	--	450.00		
	cross road 3 W/E		1	75.00	6.00	--	450.00		
							1975.40	29.68	**58629.87**
	Basic rate	**28**							
	Area Weightage 6%	**1.68**							
	Final Rate	**29.68**							
11	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	For Laying BC	Sqm							
	Sadiq layout cross roads								
	cross road 1		1	32.00	4.70	--	150.40		
	cross road 2		1	25.00	4.60	--	115.00		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1	135.00	6.00	--	810.00		
	cross road 2 W/E		1	75.00	6.00	--	450.00		
	cross road 3 W/E		1	75.00	6.00	--	450.00		
							1975.40	12.72	**25127.09**

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Basic rate	**12**							
	Area Weightage 6%	**0.72**							
	Final Rate	**12.72**							
12	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	For Laying BC	Cum							
	Sadiq layout cross roads								
	cross road 1		1.00	32.00	4.70	0.040	6.02		
	cross road 2		1.00	25.00	4.60	0.040	4.60		
	Huqba masjid road c/s roads								
	cross road 1 W/E		1.00	135.00	6.00	0.040	32.40		
	cross road 2 W/E		1.00	75.00	6.00	0.040	18.00		
	cross road 3 W/E		1.00	75.00	6.00	0.040	18.00		
							79.02	8013.60	**633202.62**
	Basic rate	**7560**							
	Area Weightage 6%	**453.6**							
	Final Rate	**8013.6**							
13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line		2	342.00	0.15	--	102.60		
							102.60	542.72	**55683.07**
	Basic rate	**512**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
								Total Construction Cost	**2680728.08**
14	Add cost of **Waste Plastic** @ 8% of Bitumen weight								
	Bitumen = 141 kg/cum		--	--	--	--	**891.30**	27.00	**24065.00**
	Waste =79.02X 141 X 8 / 100 =891.30								
15								**Cost towards Design Report , PMC / Third Party inspection LS**	**26807.28**
16								**Tender Premium 10%**	**268072.81**
								Sub Total	**2999673.17**
17								**Miscellaneous and rounding off**	**326.83**
								Total	**3000000.00**

Certificate.

1 The workspot was inspected and work is found to be necessary.
2 The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
4 The provisions made in the estimate are necessary and essential.

Assistant Engineer | Assistant Executive Engineer | Executive Engineer 27/11

Administrative Approval
Accorded For ..... 30.00 lakh Rs.
Head of A/C..... P3316
CER NO :.....182..... Dt:..28/11/17

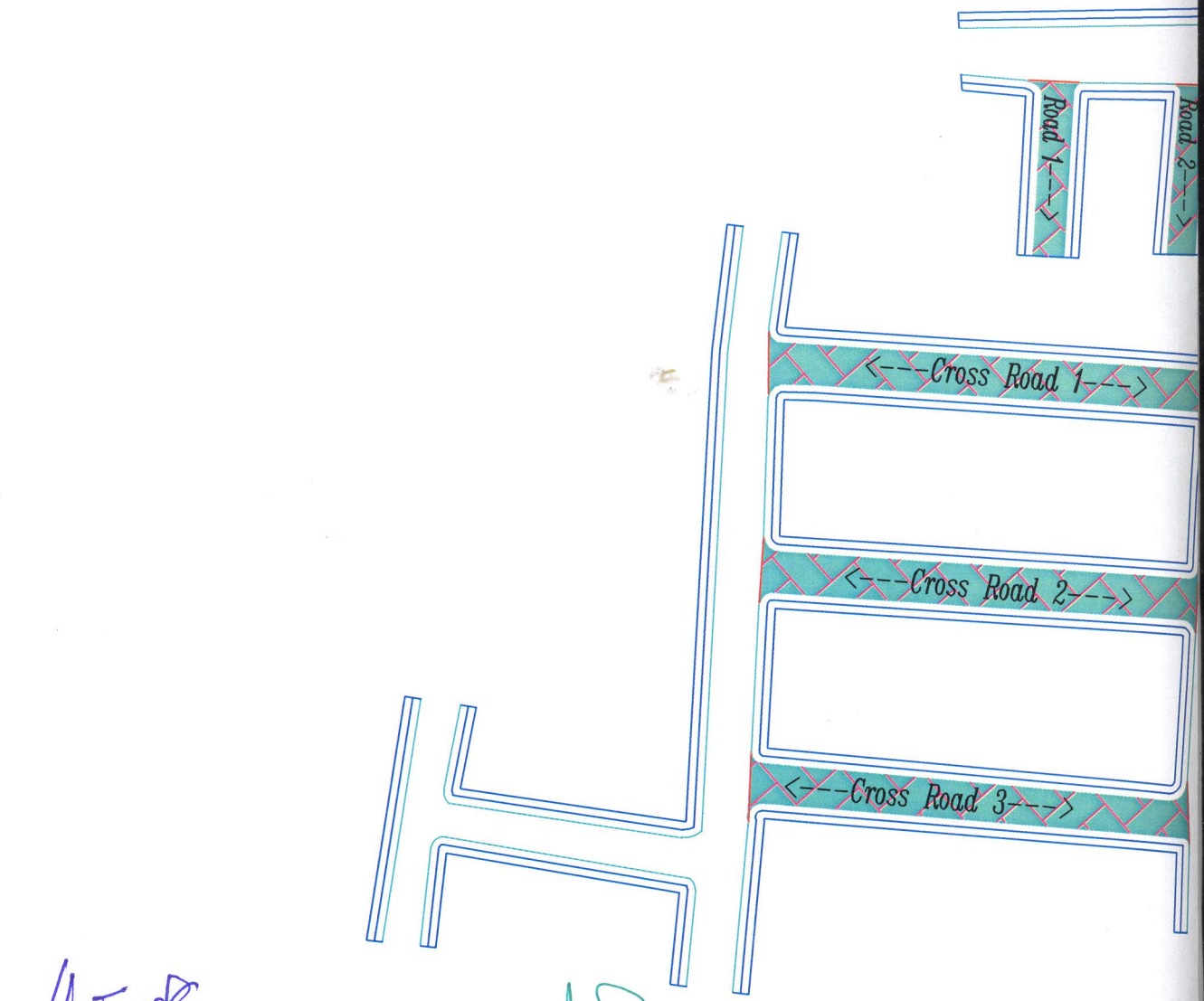
TA | CE (YNK)

Technical Sanction
Accorded For ..... 30.00 lakh Rs.
Head of A/C..... P3316
CER NO :.....467..... Dt:..28/11/17

TA | CE (YNK)

BRUHAT BANGAL

Providing Cement Concrete Road and Improvements to Drains at Sadiq



NOTE:-

1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

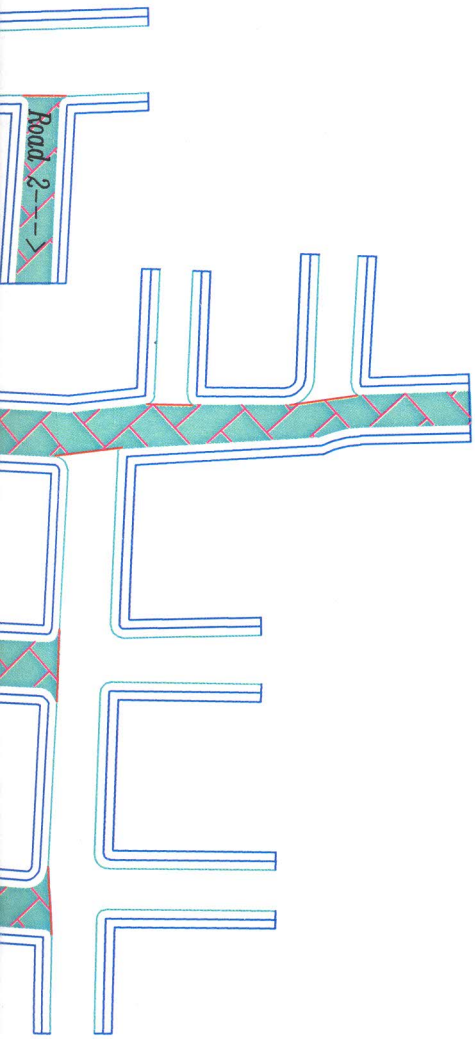
DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

LEGE
Aspha
Aspha
CC F
CC F
Drain

GALORE MAHANAGARA PALIKE

diq Layout Cross Roads in Ward No 06 Byatarayanapura Sub division



Road Name	Length
Cross Road 1	135m
Cross Road 2	75m
Cross Road 3	75m
Road 1	32m
Road 2	25m

LEGEND:-

Asphalt		WMM+BC
Asphalt		BC
CC Road		PCC+PQC
CC Road		PQC
Drain		

TITLE: STRIP PLAN 1/1